

Preparing a Tracer Study Plan

OHA Drinking Water Services

November 2019



A tracer study plan must be submitted for review and approval to Drinking Water Services prior to conducting a tracer study. Failure to receive prior approval may result in the tracer study results not being accepted and it having to be redone.

Be prepared to provide the following information in your tracer study plan:

- Who will be conducting the tracer study? When will the tracer study be conducted?
- What chemical will be used as the tracer? How will the tracer dosage be determined?
Note: Be sure to keep chlorine residual at levels to ensure disinfection CT (Chlorine residual x contact Time) requirements will be met at all times during the tracer study.
- What is the total volume of the reservoir or clearwell (i.e. contact chamber) being used for the tracer study?
- Is there additional transmission line volume between the contact chamber and the first user that will be included in the tracer study (not preferred)? If yes, explain why this additional volume needs to be included in the tracer study.
- Is there a flow meter at the contact chamber outlet that measures gpm? If no, how will peak hourly flow be determined for the tracer study?
- What is the peak hourly demand leaving the contact chamber?
- At what flow rate(s) will the tracer study be conducted? How will this flow be maintained during the tracer study?
- What is the lowest operating volume of the contact chamber?
- What is the planned contact chamber volume range from beginning to end of tracer study?
- A schematic must be provided that clearly shows:
 - The contact chamber used for contact time
 - All chlorine injection points (including those used during normal operation as well as during the tracer study, if different).
 - All chlorine measuring locations (including those used during normal operation as well as during the tracer study, if different).
 - The first user.

Example schematic:

